Autism is a neurodevelopmental disorder that affects social interaction, communication, and behavior, and occurs in approximately one out of every 88 children. The Waisman Center is strongly committed to solving the autism puzzle and providing high-quality services to children and adults with autism and their families. We are uniquely positioned to make major advances in the understanding of autism because of its multidisciplinary approach and ability to conduct research, training, service, and outreach programs under one roof. The scope of the Waisman Center’s autism-related activities continues to expand as we actively pursue the development of more research into the causes, consequences, and treatments of this complex disorder.

Resources & Services

**Autism and Developmental Disabilities Clinic**  608.263.3301
Our clinic offers specialized diagnostic and developmental assessment services to persons who have, or are suspected of having, a variety of developmental disorders, including autism. Family members and community personnel have an important role on this team; their input, questions, and opinions are indispensable. As a part of each evaluation, family members and staff meet to review findings and formulate recommendations.

**Early Childhood Education**  608.263.5760;  ershler@waisman.wisc.edu
The Waisman Early Childhood Program is a model inclusive preschool in which one-third of the enrollment is reserved for children with developmental disabilities. Since its inception in 1979, children with autism have been an integral part of the program.

**Community Outreach for Children with Challenging Behaviors**
Community Training, Intervention and Evaluations Services (TIES) is an outreach program for children and adults with developmental disabilities who present various challenging behaviors, including withdrawal, aggression, and self-injury. The mission of Community TIES is to address behavioral, psychological, and emotional needs using therapeutic approaches that insure continued participation in the community. TIES provides counseling, crisis response, psychiatric consultation, parent education, and support, and training for personnel and program consultation in local human service agencies. Directed by Paul White, MA, and funded by Dane County, this program maintains an active caseload of about 250 children and adults residing in Dane County. Individuals with autism spectrum disorders (ASD) represent approximately 30 percent of the Community TIES caseload.
Investigating the dynamics of families of children with autism spectrum disorder. The goal of this study is to examine the within-family associations between child functioning, parent experiences, and marital adjustment as these processes unfold in naturalistic contexts and across five years. We hope to understand the role of marital quality in dealing with child-related challenges and how successful adaptation to the challenges of having a son or daughter with autism spectrum disorder, and may even grow closer, whereas other couples are not. Findings from this study will be used to identify potential avenues for improving the well-being of both parents and children with autism spectrum disorder.

Transferring Together
Leann Smith, PhD, assistant clinical professor of pediatrics and Waisman Center investigator, is conducting a randomized clinical trial of “Transitioning Together,” an adolescent and family intervention aimed at reducing stress and improving coping strategies during the transition to adulthood. The intervention involves weekly education and support group sessions for parents that cover topics such as transition planning, problem solving, and legal issues. Adolescent group meetings run concurrently and include a variety of social and learning activities to foster social skills development. Smith’s project is funded by Autism Speaks and is a collaboration with Mallick and Greenberg incorporating the results from their 14-year longitudinal study of the families of adolescents and adults with ASD. Recently, “Transferring Together” was expanded as part of a multi-university research program, Center on Secondary Education for Students with Autism Spectrum Disorders (CSESA). The center will develop new programs and services for high school students with autism spectrum disorders and will assess the effectiveness of these school- and community-based educational programs and interventions. The work at the UW-Madison site of the project, led by Smith and Mallick, is centered on the areas of transition of high school into the adult world. Specifically, the research team at the Waisman Center is partnering with high schools in Wisconsin to develop and evaluate instructional strategies and methods to prepare students for the transition out of high school, with a special focus on providing education and support to families and incorporating student and family perspectives into the transition planning process. The goal of this project is to optimize educational, vocational, and social outcomes for students with ASD following high school exit. The overall CSESA program, which is funded by a $10 million grant from the U.S. Department of Education’s Institute of Education Sciences, is based at the University of North Carolina-Chapel Hill, and other participating universities include the University of North Carolina-Chapel Hill; University of California, Davis; University of Texas-Austin; and Vanderbilt University.

Speech, Communication and Language
Waisman Center investigator Lawrence D. Shriberg, PhD, professor emeritus of communication sciences and disorders, in collaboration with investigators at the Yale Child Study Center and the Center on Human Development and Disability, University of Washington, researches the unique ways people with ASD process speech and talk. These projects are funded by grants from the National Institutes of Health and the Simons Foundation Autism Research Initiative. Using computerized analyses of the speech of individuals with ASD, Shriberg and his colleagues are pursuing two questions: Are there differences in the prevalence of subtypes of speech sound disorders in children with verbal ASD compared to prevalence rates in the general population and in persons with several other types of neurodevelopmental disorders? What is the level of support for the hypothesis of Childhood Apraxia of Speech (CAS) in persons with verbal ASD with and without 16p11.2 microdeletion syndrome?

Findings addressing the first question indicate that in comparison to the general population, samples of children with verbal ASD have moderately higher prevalence rates of two subtypes of speech sound disorders, characterized primarily by differences in certain speech sound distortions and pitch and stress differences. In a subsequent study addressing the second question support the hypothesis of CAS, a rare motor speech disorder, in some children with verbal ASD and 16p11.2 microdeletions. Findings have implications for individualizing speech-language treatment for children and adults with ASD.

Examining language development in children, including individuals with autism, is the primary focus of research by Susan Ellis Weismer, PhD, a Waisman Center investigator and professor of communication sciences and disorders, while working with the Language Comprehension and Language Processes Lab. This lab has three research projects related to autism: the Language and Attention Project, the Toddler Language Comprehension Project, and LUNGO. For the Language and Attention Project—conducted in collaboration with Waisman Center investigator and associate professor of communication sciences and disorders Margarita Kaushansky, PhD—Ellis Weismer is currently recruiting 8- to 11-year-old children who have an ASD (autism, PDD-NOS, Asperger’s). Participation involves several visits to the Waisman Center to complete computer and book activities. This work will provide insight into the relationship between executive function (i.e., higher-level cognitive abilities that control and regulate behavior) and language skills in children with a variety of language abilities. Ellis Weismer is also recruiting children 24 to 35 months of age who have an autism spectrum disorder, or are suspected of being on the autism spectrum, for the Toddler Language Comprehension Project. Participation in this study involves a parent interview and developmental assessments at the Waisman Center. The LUNGO study is an investigation of word learning and visual attention in children with autism. These studies are aimed at identifying predictors of how children with ASD learn language and determine the interplay between language abilities and certain aspects of cognitive control mechanisms.

Quality of Life
Maclntick, Christopher Coe, PhD, were recently awarded a grant from Autism Speaks to study the quality of life of adults with autism spectrum disorders in early adulthood and midlife. This research will reconceptualize quality of life for this population, investigate how trajectories of autism symptoms, behavior problems, functional abilities, and health predict quality of life, and will explore how biomarkers of aging are related to changes in quality of life outcomes. The results of this study have the potential to inform the design of interventions, treatments, and services aimed at enriching the lives of individuals with ASD and their families over the life course.

Family Outcomes in Autism Spectrum Disorder
Sigan Hartley, PhD, Waisman Center investigator and assistant professor of human development and family studies, is investigating the dynamics of families of children with autism spectrum disorder. The goal of this study is to examine the within-family associations between child functioning, parent experiences, and marital adjustment as these processes unfold in naturalistic contexts and across five years. We hope to understand the role of marital quality in dealing with child-related challenges and how successful adaptation to the challenges of having a son or daughter with autism spectrum disorder, and may even grow closer, whereas other couples are not. Findings from the study will be used to identify potential avenues for improving the well-being of both parents and children with autism spectrum disorder.